

## AMENDMENTS

### **Amendments to the Claims:**

Please amend the claims as follows:

1. (Currently Amended) An apparatus for managing data in a grid computing environment, the apparatus comprising:

a computing node configured to execute a plurality of executable code modules, the executable code modules comprising:

a GUI generation module configured to examine user credentials and generate web-based graphical user interfaces to view data replications on multiple network nodes and enable a user to initiate modification or deletion of data on a selected node;

a replication management module configured to conduct data replication operations including directory-based replication operations based on user input; and

the replication management module further configured to invoke generation of at least one graphical user interface, the at least one graphical user interface configured to facilitate invocation of the data replication operations by a user.

2. (Original) The apparatus of claim 1, wherein the replication management module is further configured to invoke a replica location service associated with the grid.
3. (Original) The apparatus of claim 2, wherein the replica location service is configured to access at least one replica location index.

4. (Original) The apparatus of claim 2, wherein the replica location service is configured to access at least one local replica catalog.
5. (Original) The apparatus of claim 1, wherein the replication management module is further configured to invoke a file transfer service.
6. (Original) The apparatus of claim 5, wherein the file transfer service is selected from the group consisting of ftp, grid ftp, http, rft, and file.
7. (Cancelled)
8. (Original) The apparatus of claim 1, wherein the replication operations are conducted on search results.
9. (Original) The apparatus of claim 1, wherein the replication management module is further configured to change attributes associated with a file.
10. (Original) The apparatus of claim 1, wherein the replication management module is further configured to conduct publishing operations.
11. (Previously Amended) A method for managing data in a grid computing environment, the method comprising:

providing a dynamic web-based graphical user interface configured to facilitate invocation of data replication operations by a user including directory-based replication operations;

enabling a user to initiate modification or deletion of data on a selected node;

providing a search interface for discovering replicated data including directory based replicated data;

invoking a replica location service configured to aggregate information about local replica catalogs and map logical file names to physical file names; and

conducting local or remote data replication and mapping operations in response to selections on the graphical user interface by the user.

12. (Original) The method of claim 11, further comprises accessing at least one replica location index.

13. (Original) The method of claim 11, further comprises accessing at least on local replica catalog.

14. (Original) The method of claim 11, further comprises invoking a file transfer service.

15. (Original) The method of claim 11, wherein the at least one graphical user interface comprises at least one web page.

16. (Previously Amended) A computer readable storage medium comprising computer readable program code for managing data in a grid computing environment, the program code configured to conduct a method comprising:

providing a dynamic web-based graphical user interface configured to facilitate invocation of data replication operations by a user including directory-based replication operations;

enabling a user to initiate modification or deletion of data on a selected node;

invoking a replica location service configured to aggregate information about local replica catalogs and map logical file names to physical file names; and

conducting the data replication operations in response to selections on the graphical user interface by the user.

17. (Original) The computer readable storage medium of claim 16, wherein the method further comprises accessing at least one replica location index.

18. (Original) The computer readable storage medium of claim 16, wherein the method further comprises accessing at least one local replica catalog.

19. (Original) The computer readable storage medium of claim 16, wherein the method further comprises invoking a file transfer service.

20. (Cancelled)

21. (Original) The computer readable storage medium of claim 16, wherein the replication operations are conducted on catalog search results.

22. (Original) The computer readable storage medium of claim 16, wherein the method further comprises changing attributes associated with a file.

23. (Original) The computer readable storage medium of claim 16, wherein the method further comprises conducting publishing operations.

24. (Previously Amended) An apparatus for managing data in a grid computing environment, the apparatus comprising:

means for providing a dynamic web-based graphical user interface configured to enable a user to initiate modification or deletion of data on a selected node and facilitate invocation of data replication operations including directory-based replication operations;

means for invoking a replica location service configured to aggregate information about local replica catalogs and map logical file names to physical file names; and

means for conducting the data replication operations in response to selections on the graphical user interface by the user.

25. (Original) A system for managing data in a grid computing environment, the system comprising:

at least one computing node having a replica location index thereon, the replica location index configured to map logical names to a local replica catalog; and

a replication server configured to generate at least one graphical user interface and conduct data replication operations including directory-based replication operations in response to user selections on the graphical user interface.

26. (Original) The system of claim 25, further comprising at least one computing node having a local replica catalog thereon, the local replica catalog configured to map logical names to physical file names.

27. (Cancelled)

28. (Original) The system of claim 25, wherein the replication server is further configured to conduct publishing operations, conduct replication operations on search results, and change attributes associated with a file.

29. (Original) The system of claim 25, wherein the replication server is further configured to invoke a replica location service associated with the grid.

30. (Original) The system of claim 25, wherein the replication server is further configured to access at least one replica location index.